



Staff Report

DISCUSSION AND DIRECTION REGARDING PUBLIC WORKS PERFORMING SLURRY SEALING OF ROADWAYS IN THE CITY OF BELMONT USING IN-HOUSE STAFF

Honorable Mayor and Council Members:

Summary

Staff requests that City Council provide discussion and direction on whether the City should pursue bringing slurry seal construction projects in-house, with work to be performed with Public Works Services staff.

Background

On March 25, 2008, the City Council provided Staff with direction to perform additional evaluation of an option to bring slurry seal maintenance work in-house to be performed with Public Works Services staff. Public Works staff has worked with the Finance Department to prepare an evaluation of the cost effectiveness of this proposed alternative and results of the analysis are presented here. The analysis is one outlined by the Privatization Center that includes a methodology to evaluate cost between in-house and contracted services. On April 29, 2008 the City Infrastructure Committee met to discuss. The Committee concluded they were comfortable with moving forward with this approach.

Discussion

In January and March, the Council heard detailed information regarding the evaluation of City roadways, and how the data compiled is used to determine recommendations for slurry sealing, overlay, and reconstruction of roadways. The pavement management plan for the City of Belmont is developed by the Metropolitan Transportation Commission (MTC) and is consistent with State requirements. MTC's recommended strategy, and evaluation methodology using the Streetsaver Program, is to prioritize funding to hold all Good condition street segments at that level while using remaining available funds to rebuild poorer condition pavement. An ongoing program of preventative maintenance is the most cost effective approach to extend pavement life.

Approximately half of the City of Belmont roadways are currently in Good condition and would remain in Good condition for a number of years with continued applications of preventative maintenance such as slurry seal. Certain roadways in Satisfactory condition would also benefit from application of slurry seal, combined with patching. Other roadways, including those in Fair or Poor condition, will require reconstruction or overlay to repair.

The breakout of recommended preventative maintenance and rehabilitation is as follows:

MAINTENANCE BY TYPE		
	Square Yards	Cost
<u>SLURRY AND CRACK SEAL</u>		
<i>Preventative Maintenance</i>		
Slurry Seal	375,000	\$ 1,300,000
<i>Rehabilitation</i>		
Patch and Slurry Seal	135,000	\$ 850,000
*Slurry and Crack Seal Subtotal	510,000	\$ 2,150,000
<u>OVERLAY AND RECONSTRUCT</u>		
<i>Preventative Maintenance</i>		
Thin Overlay	2,000	\$ 30,000
<i>Rehabilitation</i>		
AC Overlay	145,000	\$ 4,740,000
Mill and Thick AC Overlay	75,000	\$ 2,360,000
Reconstruct Structure	270,000	\$22,100,000
Overlay and Reconstruct Subtotal	492,000	\$29,230,000
Total	1,002,000	\$31,380,000

* Represents work to be done in-house. Crack sealing preventative maintenance not included.

The costs shown above are from the Streetsaver Program and include the cost for work items proposed. The unit costs shown compare favorably with actual city cost for construction from 2007 projects completed for slurry seal work. If the City were to devote all planning level budgeted Capital Improvement funds for paving to the slurry seal program, and have the work done by contractors, the slurry seal work could be completed within six years.

The alternative evaluated is to bring the slurry seal construction in-house. The cost of a new slurry seal truck is \$275,000.00. In order to maintain other service programs, this new program would require the hiring of two additional staff persons in the Services Division. The cost for two additional field staff members is approximately \$85,000 per year, per employee. Funding for staff cost for street maintenance activities would come from the Gas Tax. Material cost for raw material such as the asphalt emulsion and aggregate base would come from Measure A and Gas Tax funds.

An evaluation of the cost for the City to perform in-house slurry sealing as compared to the cost to have performed by contract is provided on the attached table. The evaluation looked at the

funds that would be available to use for acquisition of the materials needed for slurry seal construction if the city budgeted the same amount as currently provided in the city Capital

Improvement Program, or approximately \$2.5 million dollars over six years. Under this scenario it is estimated that the City would have approximately \$650,000 remaining, after paying for striping and other direct costs of, available for slurry seal material. This would provide adequate funds to complete the same slurry seal program in four years that would be completed in six years with capital projects.

With slurry sealing of roadways recommended on a seven year cycle, the City would be able to apply slurry seal to the roadways that would currently clearly benefit, as well as additional roadways where the benefit is less measurable. This program could accommodate the slurry sealing of roadways that would be unlikely to receive such an application under the current program where work is done by outside contractors. It is estimated that the Average City PCI would be 53 in 2013 and the percentage of pavement in each condition category, would be similar to under the current program.

Any excess funds could also be applied to perform overlay projects. The cost savings should be used to complete overlay work in conjunction with completion of all of the slurry seal work. It is estimated that the Average City PCI would be 53 in 2013 and the percentage of pavement in each condition category, would be similar to under the current program. This approach of completing the most critical overlay work, of roadways that need a less expensive thin overlay, would improve to Good condition a small percentage of the roadways system that would otherwise deteriorate to Satisfactory condition under the current program.

In the previous report, advantages to the proposed approach were discussed. The advantages included elimination of soft costs such as cost for staff to prepare detailed plans, specifications, and estimates (PS&E) and cost to advertise, award, and perform construction oversight of the contract for slurry seal construction projects. With an in-house maintenance program slurry work could be more of an ongoing maintenance activity. This would make it more feasible to do smaller projects with a shorter lead time than with the current contract approach.

Potential limitations include scheduling constraints due to the need to devote a significant percentage of the roadway services staff to the slurry seal program when it was in progress. Advance time to implement the first year and bring the program up to full efficiency and ongoing monitoring of the results is another consideration. The hiring of staff may include some risk to injury and related cost; but this type of construction is considered to be a fairly low risk type of construction when proper safety procedures are followed. The possibility to lease equipment to adjoining cities might be another option to explore once the program was underway, although this approach would require careful consideration.

Ultimately the decision to bring this maintenance work in house is a policy one. The approach would be an innovative and unique one not currently utilized by surrounding communities.

General Plan/Vision Statement

The City's Pavement Management Program is consistent with the General Plan. The Circulation Element, Description of Trafficways (Paragraph 2103) notes that there are a number of streets

with substandard pavement condition and that the ongoing phased street overlay program will improve pavement condition and extend the life of existing streets.

Fiscal Impact

There is no fiscal impact from this informational report.

Public Contact

The Council agenda was posted.

Recommendation

Staff recommends that Council provide discussion and direction on implementation and inclusion in the City budget for FY 2008/09 of proposal to bring the slurry seal program in-house.

Alternatives

1. Take no action.
2. Refer back to staff for further information.

Attachments

- A. Slurry Seal Cost Comparison – FY 08-09

Respectfully submitted,

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